#### Sheet 1 of 4

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

<b>O</b> 1100 <b>C</b> 1 01 1	
Application Number	10/562,843
Filing Date	May 15, 2006
First Named Inventor	Luke Alphey
Art Unit	1636
Examiner Name	James S. Ketter
Attorney Docket Number	138-05

Confirmation No.

5995

GS 12/23/2010

### **U.S. PATENT DOCUMENTS**

Examiner Initial*	Cite No.	Patent Number	Issue Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	5,254,801	10-19-1993	Dotson et al.	
	2	6,962,810	11-08-2005	Fraser et al.	
	3	6,200,800	03-13-2001	Choulika et al.	
	4	5,851,796	12-22-1998	Schatz	
	5	6,338,040	01-08-2002	Buman et al.	

### **U.S. PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No.	Publication Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	6	2003/0150007	08-07-2003	Savakis et al.	
	7	2003/0213005	11-13-2003	Alphey et al.	
	8	2005/0221430	10-06-1995	Prentice	
	9	2006/0275276	12-07-2006	Alphey	
	10	2006/0242717	10-26-2006	Alphey	
	11	2007/0056051	03-08-2007	Alphey	
	12	2008/0115233	05-15-2008	Alphey et al.	
	13	2009/0183269	07-16-2009	Alphey	

### **FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No.	Foreign Document Number	Country Code	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	14	0955364	EP	11-10-1999	Savakis et al.		
	15	2000/073510	WO	12-07-2000	Bessereau et al.		
	16	2355459	GB	04-25-2001	Alphey et al.		
	17	2001/39599	WO	06-07-2001	Alphey et al.		
	18	2001/59088	WO	08-16-2001	Chernajovsky et al.		
	19	2004/098278	WO	11-18-2004	Alphey		
	20	2005/003364	WO	01-13-2005	Alphey		
	21	2005/012534	WO	02-10-2005	Alphey		
	22	2007/091099	WO	08-16-2007	Alphey		

### **NON-PATENT LITERATURE DOCUMENTS**

Examiner Initial*	Cite No.	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	23	Prosecution history for related application USSN 10/148,041, 64 pp.	
	24	Prosecution history for related application USSN 10/556,804, 27 pp.	

Examiner	/James Ketter/	Date	01/29/2011
Signature	/ Can ( Can ( Can ) )	Considered	01/23/2011

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional).

<sup>&</sup>lt;sup>2</sup>Applicant is to place a check mark here or "x" if English language Translation is attached.

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

# SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

011000 2 01 1	
Application Number	10/562,843
Filing Date	May 15, 2006
First Named Inventor	Luke Alphey
Art Unit	1636
Examiner Name	James S. Ketter
Attorney Docket Number	138-05

Confirmation No. 5995 GS 12/23/2010

		REFERENCE	
Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item	T 5
Initial*	No.	(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
		publisher, city and/or country where published.	
	25	Prosecution history for related application USSN 10/566,448, 142 pp.	
	26	Prosecution history for related application USSN 11/352,177, 129 pp.	
	27	Prosecution history for related application USSN 11/733,737, 175 pp.	
	28	Prosecution history for related application USSN 12/278,849, 20 pp.	
	29	Examination Report for European patent application serial number 04743590.4,	
		dated November 14, 2008, 4pp.	
	30	Search Report Corresponding to Great Britain Patent Application No. GB 0317656.7,	
		Date of Search November 25, 2003.	
	31	Search Report Corresponding to Great Britain Patent Application No. GB 0621234.4,	
		Date of Search February 21, 2007.	
	32	Search Report Corresponding to International Application No. PCT/GB2004/003263,	
		Mailed May 11, 2004.	
	33	Search Report corresponding to International Application No. PCT/GB2007/000488,	
		parent of the present application. (2007)	
	34	Written Opinion corresponding to International Application No. PCT/GB2007/000488,	
		parent of the present application. (2007)	
	35	International Preliminary Report on Patentability, corresponding to International	
		Application No. PCT/GB2007/000488, parent of the present application. (2007)	
	36	ALPHEY et al. (2002) "Dominant Lethality and Insect Population Control," Mol.	
		Biochem. Parasitol. 121(2):173-178.	
	37	ALPHEY et al. (2007) "Managing Insecticide Resistance by Mass Release of	
		Engineered Insects" J. Econ. Entomol. 100(5):1642-1649.	
	38	ARRIBAS et al. (1986) "The ubiquitin genes in <i>D. melanogaster</i> : transcription and	
		polymorphism" Biochimica et Biophysica Acta 868:119-127.	
	39	BIESCHKE et al. (1998) "Doxycycline-Induced Transgene Expression During	
		Drosophila Development and Aging," Mol. Gen Genet. 258(6):571-579.	
	4.0	BLITVICH et al. (2002) "Developmental- and tissue-specific expression of an	
	40	inhibitor of apoptosis protein 1 homologue from <i>Aedes triseriatus</i> mosquitoes" Insect	
	4.4	Molecular Biology 11(5):431-442.	
	41	CARRIERE and TABASHNIK (2001) "Reversing Insect Adaptation to Transgenic	
	40	Insecticidal Plants," Proc. R. Soc. Lond. B. 268:1475-1480	
	42	CHEN et al. (1996) "Apoptotic Activity of REAPER Is Distict from Signaling by the	
		Tumor Necrosis Factor Receptor 1 Death Domain" The Journal of Biological	
	43	CHEN et al. (2000) "The Lise of Modified Tetracycline Regulatory Expression	
	43	CHEN et al. (2000) "The Use of Modified Tetracycline Regulatory Expression System with Reduced Basal Level to Develop and In Vivo Biopesticide Expression	
		System," Food Sci Agricult. Chem. 2(4):220-225.	
		DAVIS et al. (2001) "Engineered Underdominance Allows Efficient and Economical	
	44	Introgression of Traits into Pest Populations," J. Theor. Biol. 212(1):83-98.	
		milegression of fraits into rest repulations, 0. Theor. Diol. 212(1).00-30.	

Signature   Considered   U1/29/2011	Examiner Signature	/James Ketter/	Date Considered	01/29/2011
-------------------------------------	-----------------------	----------------	--------------------	------------

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional).

<sup>&</sup>lt;sup>2</sup>Applicant is to place a check mark here or "x" if English language Translation is attached.

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

# SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

011000001	
Application Number	10/562,843
Filing Date	May 15, 2006
First Named Inventor	Luke Alphey
Art Unit	1636
Examiner Name	James S. Ketter
Attorney Docket Number	138-05

Confirmation No. 5995 GS 12/23/2010

Examiner Initial*	Cite	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),	T 5
IIIIIai	No.	publisher, city and/or country where published.	
	45	ERNST, U. (1991) "Regulation of Sexual Differentiation in <i>Drosophila</i> : Alternative	
		Splicing of the <i>Transformer</i> Primary Transcript Requires Masking of the Non-Specific	
		Acceptor Site in Females," Inaugural Dissertation, Aus Frankfurt / Main, BRD	
		(ABSTRACT ONLY).	
	46	ERNST, U. (1991) "Regulation of Sexual Differentiation in <i>Drosophila</i> : Alternative	
		Splicing of the <i>Transformer</i> Primary Transcript Requires Masking of the Non-Specific	
		Acceptor Site in Females," Inaugural Dissertation, Aus Frankfurt / Main, BRD.	
	47	FU et al. (2007) "Female-specific insect lethality engineered using alternative	
	40	splicing", Nature Biotechnology 25(3):353-357.	
	48	FUNAGUMA et al. (2005) "The Bmdsx transgene including trimmed introns is sex- specifically spliced in tissues of the silkworm, <i>Bombyx mori</i> ", Journal of Insect	
		Science (online), 5(17):1-6.	
	49	FUSSENEGGER et al. (1997) "Autoregulated Multicistronic Expression Vectors	
	43	Provide One-Step Cloning of Regulated Product Gene Expression in Mammalian	
		Cells" Biotechnol. Prog. 13:733-740.	
	50	GONG et al. (2005) "A dominant lethal genetic system for autocidal control of the	
		Mediterranean fruitfly", Nature Biotechnology 23(4):453-456.	
	51	GOSSEN and BUJARD (2001) "Tetracyclines in the control of gene expression in	
		eukaryotes" Tetracyclines in Biology, Chemistry and Medicine, pp. 139-157.	
		HEINRICH et al. (2000) "A Repressible Female-Specific Lethal Genetic System for	
	52	Making Transgenic Insect Strains Suitable for a Sterile-Release Program," Proc. Nat.	
		Acad. Sci. USA 97:8229-8232.	
	53	HOFMANN et al.(1996) "Rapid Retroviral Delivery of Tetracycline-Inducible Genes in	
		a Single Autoregulatory Cassette," Proc. Nat. Acad. Sci. USA 93:5185-5190.	
	54	HONDRED et al. (1999) "Use of Ubiquitin Fusions to Augment Protein Expression in	
		Transgenic Plants" Plant Physiology 119:713-723.	
	55	HORN et al. (2000) "Highly sensitive, fluorescent transformation marker for <i>Drosophila</i> transgenesis" Dev Genes Evol 210:623-629.	
	56	HORN et al. (2003) "A Transgene-Based Embryo-Specific Lethality System for	
	30	Insect Pest Management," Nat. Biotechnol. 21(1):64-70.	
	57	IMAI, C. (1987) "Control of Insecticide Resistance in a Field Population of	
	07	Houseflies, <i>Musca Domestica</i> , by Releasing Susceptible Flies," Res. Popul. Ecol.	
		29:129-146.	
	58	LOUIS et al. (2003) "A Theoretical Model for the Regulation of Sex-Lethal, a Gene	
		That Controls Sex Determination and Dosage Compensation in <i>Drosophila</i>	
		melanogaster," Genetics 165:1355-1384.	
	59	LOUKERIS et al. (1995) "Introduction of the transposable element <i>Minos</i> into the	
		germ line of <i>Drosophila melanogaster</i> " Proc. Natl. Acad. Sci. USA 92:9485-9489.	
	60	MUNOZ et al. (2004) "The AeAct-4 gene is expressed in the developing flight	
		muscles of female <i>Aedes aegypti</i> ", Insect Molecular Biology 13(5):563-568.	

Examiner /James Ketter/	Date Considered	01/29/2011
-------------------------	--------------------	------------

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional).

<sup>&</sup>lt;sup>2</sup>Applicant is to place a check mark here or "x" if English language Translation is attached.

#### Sheet 4 of 4

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B	Application Number	10/562,843
	Filing Date	May 15, 2006
SECOND SUPPLEMENTAL	First Named Inventor	Luke Alphey
INFORMATION DISCLOSURE	Art Unit	1636
STATEMENT BY APPLICANT	Examiner Name	James S. Ketter
	Attorney Docket Number	138-05

Confirmation No.	5995	GS	12/23/2010
------------------	------	----	------------

Examiner Initial*	Cite No.	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>		
	61	PANE et al. (2002) "The <i>transformer</i> gene in <i>Ceratitis capitata</i> provides a genetic basis for selecting and remembering the sexual fate" Development 129:3715-3725.			
	62	PORINSON et al. (2002) "Mutations and Their Use in Insect Control." Mutation			
	63	SACCONE et al. (2000) "Sex Determination in Medfly: A Molecular Approach," In; Area-Wide Control of Fruit Flies and Other Pest Insects, Tan, K.H. ed., Penerbit USM, Penag, pp. 491-496.			
	64	SACCONE et al. (2002) "Sex determination in flies, fruitflies and butterflies" Genetica 116:15-23.			
	65	SCALI et al. (2005) "Identification of sex-specific transcripts of the <i>Anopheles gambiae</i> doublesex gene", Journal of Experimental Biology 208(19):3701-3709.			
	66	SHELTON et al. (2000) "Field Tests on Managing Resistance to <i>Bt</i> -Engineered Plants", Nature Biotechnology 18(3):339-342.			
	67	SHOCKETT et al. (1995) "A Modified Tetracycline-Regulated System Provides Autoregulatory, Inducible Gene Expression in Cultured Cells and Transgenic Mice," Proc. Nat. Acad. Sci. USA 92:6522-6526.			
	68	STEBBINS et al. (2001) "Tetracycline-Inducible Systems for <i>Drosophila</i> ," <i>Proc. Nat. Acad. Sci. USA</i> . 98:10775-10780.			
	69	STEBBINS et al. (2001) "Adaptable Doxycycline-Regulated Gene Expression Systems for <i>Drosophila</i> ," Gene 270:103-111.			
	70	THOMAS et al. (2000) "Insect Population Control Using Dominant, Repressible, Lethal Genetic System," Science 287:2474-2476.			
	71	WOOL and MANHEIM (1980) "Genetically-Induced Susceptibility to Malathion in <i>Tribolium Castaneum</i> Despite Selection for Resistance," Ent. Exp. & Appl. 28:183-190.			
	72	WU et al. (2000) "Expression of Highly Controllable Genes in Insect Cells Using a Modified Tetracycline-Regulated Gene Expression System," J. Biotechnol. 80(1):75-83.			

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JK/

Examiner Signature	/James Ketter/	Date Considered	01/29/2011

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional).

<sup>&</sup>lt;sup>2</sup>Applicant is to place a check mark here or "x" if English language Translation is attached.